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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/752,817   | 01/03/2001  | Shunpei Yamazaki     | 12732-003001/US4564 | 9971             |
| 26171  | 7590        | 01/25/2005           | EXAMINER            |                  |
| FISH & RICHARDSON P.C.<br>1425 K STREET, N.W.<br>11TH FLOOR<br>WASHINGTON, DC 20005-3500 |             |                      | NGUYEN, CHANH DUY   |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 2675                |                  |

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/752,817             | YAMAZAKI ET AL.     |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | Chanh Nguyen           | 2675                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04/04,05/04,08/04</u> . | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Amendment***

1. The amendment filed on August 25, 2004 has been entered and considered by examiner.

***Information Disclosure Statement***

2. The references listed on the Information Disclosure Statements filed on April 07, 2004, May 27, 2004 and August 25, 2004 have been considered by examiner; see attached PTO-1449s.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2675

5. Claims 5, 7-10, 12, 13-15, 17-20, 22-26, 28-31, 33-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,265,833) in view of Yamada et al. (5,990,629).

With regard to claim 5, Kim et al. teaches a display system comprising: a light-emitting device (figure 1, item 5) comprising plurality of pixels; each of said plurality of pixels having at least an EL element (column 1, lines 10-16 and column 9, lines 57-63), a sensor for obtaining an information signal of an environment (figure 1, item 1), a CPU for converting an electrical signal supplied from said sensor into a correction signal (figure 1, item 3), and a voltage changer for controlling a corrected potential based on said correction signal (figure 1, item 4).

With further regard to claim 5 Kim et al. does not illustrate the details of his EL display "item 511 device such as "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch".

Yamada teaches', "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch ",(See Yamada et al. figures 19, 22, and 23 items S1, S2, 101 and further SEE column 32, lines 49-67, column 33, lines 1-26, column 35, lines 37-52, column 59-67, column 36, lines 1-5, 49-67), note applicant illustrates in figure 1, item 2015 a simple circuit breaker which function to connect or disconnect the voltage changer from the EL elements and has no control over what the value of the voltage changer is. Yamada clearly teaches an EL driving power source (i.e. Ps) connected to the voltage changer (S1, S2, 101).

It would have been obvious to one of ordinary skill in the art at the time the

Art Unit: 2675

invention was made to use the EL matrix display details as illustrated by Yamada when implementing the system items 4 and 5 of Kim et al. because Kim et al. lacks these specific manufacturing details directed towards the actual EL circuit within the display therefore one of ordinary skill would have been motivated to simply use Yamada et al. when implementing items 4 and 5 system pads in the Kim et al. system illustrated, and further Yamada et al. gives motivation in column 2, lines 10-16 for using his details.

With regard to claim 7, the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said light-emitting device, said sensor, said CPU and said voltage changer are formed on a same substrate (See Kim et al. since figure 1 illustrates all the claimed pads in one illustration it is obvious that they are capable of sharing a common substrate (substrate) while enclosed above said common surface of an enclosure).

With regard to claim 8, the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said light-emitting device is an EL display device ( See Kim et al. figure 1, item 5, column 1, lines 10-15).

With regard to claim 9, the combination of Kim et al. and Yamada et al. teaches a display system according to claim 5, wherein said display system is incorporated in one selected from the group consisting of a video camera, a digital camera, a head-mount display, a car navigation system, a portable telephone, an image reproduction apparatus, a car audio equipment, and a personal computer (See Kim et al. column 10, lines 21-34 and further these specific uses of the display are viewed as merely being recitations directed towards an OBVIOUS INTENDED USED of the display).

With regard to claim 10, the combination of Kim et al. and Yamada et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Yamada et al. teaches an EL element having two electrodes with an EL layer interposed there between (see Yamada et al. figure 21) ; a current control TFT electrically connected to one of said two electrodes of said EL element (see Yamada et al. Figure 19, item 12), wherein a potential applied to the other of said two electrodes of said EL element (figure 19, item Z).

With regard to claim 12, these limitations were addressed in claim 9.

With regard to claim 13, the combination of Kim et al. and Yamada et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Yamada et al. teaches said thin film transistor comprising at least an active layer, and a gate electrode adjacent to said active layer with a gate insulating film interposed there between ; an EL element comprising at least an EL layer between an anode and a cathode, one of said anode and said cathode being electrically connected to said active layer (See Yamada et al. figures 19, 20, and 21).

With regard to claim 14, these limitations were addressed in claim 7.

With regard to claim 15 ,the combination of Kim et al. and Yamada et al. suggest an active matrix display device according to claim 13, wherein said sensor comprises a CCD or a photo-diode (See Kim et al. figure 1 item 1 an optical sensor responsive to light and since CCD or a photo-diode are both conventional they would have been an obvious choice to one of ordinary skill) .

With regard to claim 17, these limitations were addressed above in claim 9.

Art Unit: 2675

With regard to claims 18-20, 22-24, 26, 28-31, 33-35, 37, and 39 the combination of Kim et al. and Yamada et al. were shown above to read on these limitations.

With regard to claims 25 and 36 the combination of Kim et al. and Yamada 25 suggest an active matrix display device according to claim 23, further comprising an A/D converter interposed between said sensor and said CPU, and a D/A converter interposed between said CPU and said voltage changer (See Kim et al. figure 1 it is inherent that the CPU controller uses A/D for it's input and D/A for its output while interacting with analog devices shown).

6. Claims 6, 11, 16, 21 , 27, 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kim et al. (6,265,833) and Yamada et al. (5,990,629) in view of Poulton (5,702,323).

With regard to claims 6, 11 , 16, 21 , 27, 32 and 38, the combination of Kim et al. and Yamada et al. does not teach "wherein said information signal comprises a user's living-body information. However Poulton teaches, "wherein said information signal comprises a user's living-body information" (abstract, figure 5, item 230, column 2, lines 48-57, column 4, lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the optical sensor item 1 as illustrated by Kim to also keep track of body pads position as done by Poulton when implementing the system item 1 of Kim et al. because this limitation is merely directed towards an "OBVIOUS INTENDED USE" , of the combination of Kim et al. and Yamada et al. as illustrated by Poulton, and

Art Unit: 2675

further Poulton gives motivation in column 1, lines 5-10 for modifying the use the Kim item 1 which Poulton provided a further illustration of a additional "use" for the information given by a optical sensor.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 5-39 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendment, the voltage changer now interpreted as S1, S2 and 101 (see Figure 22) while the EL driving power source reads the power source (Ps) as taught by Yamada as set forth in the rejection.

### ***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Inquiries***



Art Unit: 2675

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chanh Nguyen whose telephone number is (703) 308-6603. The examiner can normally be reached on Monday- Friday.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CN

C. Nguyen  
January 21, 2005



Chanh Nguyen  
Primary Examiner  
Art Unit 2675